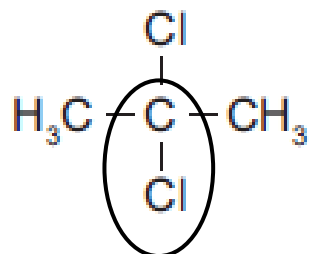
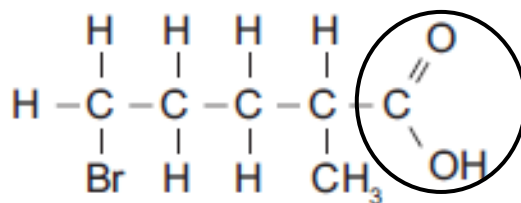


## ANSWERS: IUPAC naming

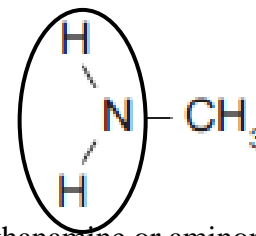
|                                                                                                                            |                                                                                                                                                                                                                                       |                                                                                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>2-iodohexane<br/><i>haloalkane</i></p>                                                                                  |                                                                                                                                                                                                                                       |                                                                                                                                                                         |
| <p>1-aminopropane<br/><i>amine</i></p>                                                                                     | $\begin{array}{c} \text{CH}_3 - \text{CH}_2 - \text{CH}_2 - \underset{\text{CH}_3}{\text{CH}} - \overset{\text{OH}}{\text{CH}} - \text{CH}_3 \end{array}$ <p>3-methylhexan-2-ol<br/><i>alcohol</i></p>                                | $\begin{array}{c} \text{Br} \\   \\ \text{CH}_3 - \text{C} - \text{CH}_3 \\   \\ \text{CH}_3 \end{array}$ <p>2-bromopropane<br/><i>haloalkane</i></p>                   |
| $\text{CH}_3 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{NH}_2$ <p>1-aminopentane<br/><i>amine</i></p> | $\begin{array}{c} \text{CH}_3 - \text{CH}_2 - \text{CH}_2 - \underset{\text{CH}_3}{\text{CH}} - \text{CH}_2 - \overset{\text{OH}}{\underset{\text{O}}{\text{C}}} \end{array}$ <p>3-methylhexanoic acid<br/><i>carboxylic acid</i></p> | $\text{CH}_3 - \underset{\text{Cl}}{\text{CH}} - \text{CH} = \underset{\text{Cl}}{\text{C}} - \text{CH}_2 - \text{CH}_3$ <p>2,4-dichlorohex-3-ene<br/><i>alkene</i></p> |
| $\text{CH}_3\text{CH}_2\text{CH}_2\text{NH}_2$ <p>propylamine or 1-aminopropane<br/>or 1-propanamine<br/><i>amine</i></p>  | $\begin{array}{c} \text{CH}_3\text{CHCH}_2\text{OH} \\   \\ \text{Cl} \end{array}$ <p>2-chloropropan-1-ol<br/><i>alcohol</i></p>                                                                                                      | $\begin{array}{c} \text{CH}_2\text{CHCH}_2\text{CH}_2\text{CH}_3 \\   \quad   \\ \text{CH}_3 \text{CH}_3 \end{array}$ <p>3-methylhexane<br/><i>alkane</i></p>           |



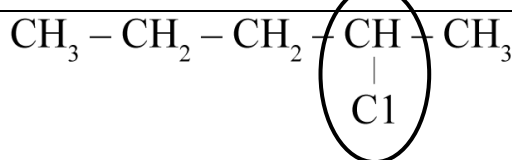
2,2-dichloropropane  
*chloroalkane/haloalkane*



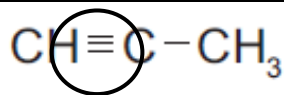
5-bromo-2-methylpentanoic acid  
*carboxylic acid*



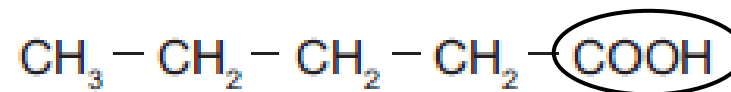
Methanamine or aminomethane  
*amine*



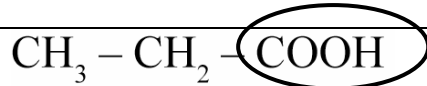
2-chloropentane  
*chloroalkane/haloalkane*



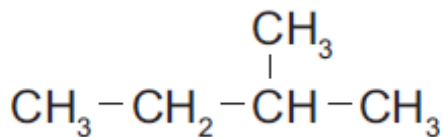
propyne  
*alkyne*



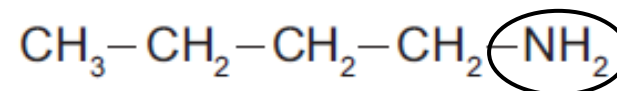
pentanoic acid  
*carboxylic acid*



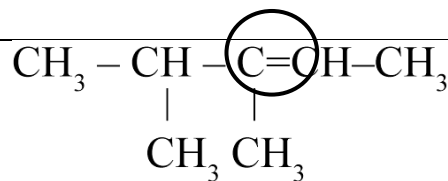
propanoic acid  
*carboxylic acid*



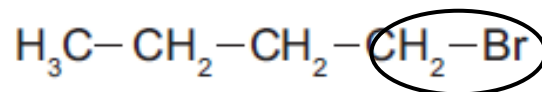
2-methylbutane  
*alkane*



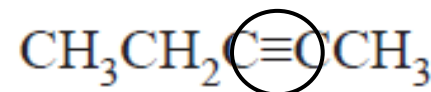
1-aminobutane  
*amine*



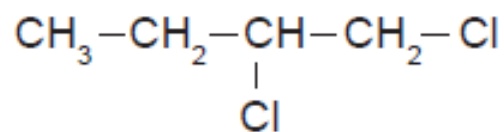
3,4-dimethylpent-2-ene  
*alkene*



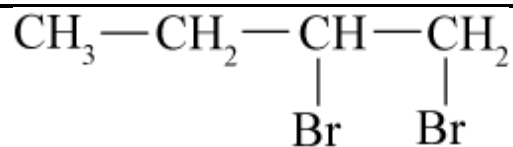
1-bromobutane  
*bromoalkane/haloalkane*



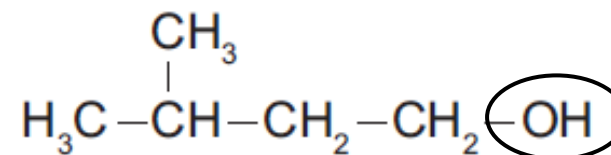
Pent-2-yne (2-pentyne)  
*alkyne*



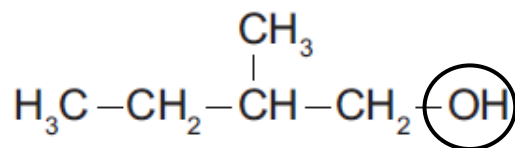
1,2-dichlorobutane  
*chloroalkane/haloalkane*



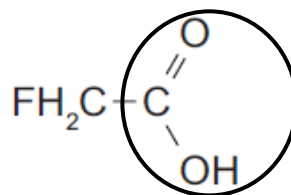
1,2-dibromobutane  
*bromoalkane/haloalkane*



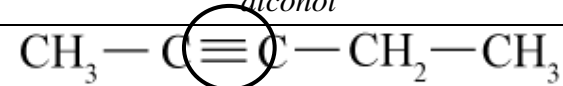
3-methyl butan-1-ol  
*alcohol*



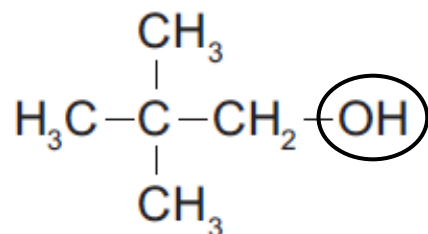
2-methyl butan-1-ol  
*alcohol*



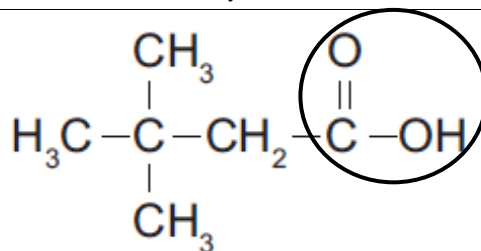
fluoroethanoic acid (2-fluoroethanoic acid)  
*carboxylic acid*



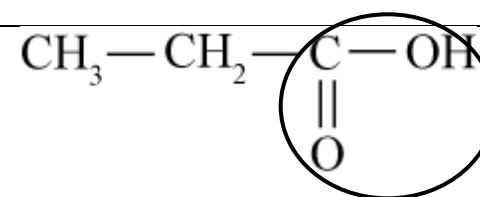
pent-2-yne  
*alkyne*



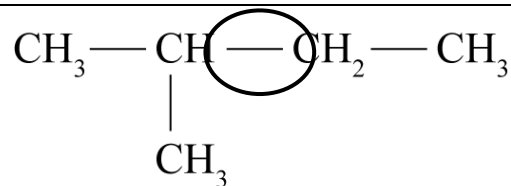
2,2 dimethyl propan-1-ol  
or dimethyl propanol  
or dimethylpropan-1-ol  
*alcohol*



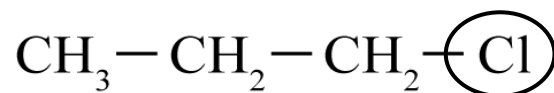
3,3-dimethylbutanoic acid  
*carboxylic acid*



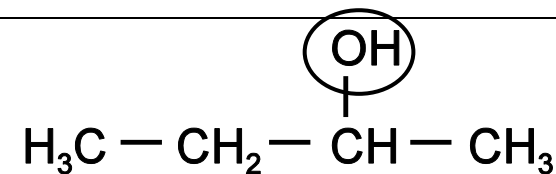
propanoic acid  
*carboxylic acid*



methylbutane or 2-methylbutane  
*alkane*



1-chloropropane  
*chloroalkane/haloalkane*



butan-2-ol / 2-butanol / 2-hydroxybutane  
*alcohol*

|                                                                                                                                                                   |                                                                                                                                                                                   |                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $\begin{array}{c} \text{OH} \\   \\ \text{CH}_3 - \text{CH} - \text{CH} - \text{CH}_3 \\   \\ \text{Cl} \end{array}$ <p>3-chlorobutan-2-ol<br/><i>alcohol</i></p> | $\begin{array}{c} \text{CH}_3 - \text{CH} - \text{CH}_2 - \text{CH}_2 - \text{NH}_2 \\   \\ \text{CH}_3 \end{array}$ <p>1-amino-3-methylbutane<br/><i>amine</i></p>               | $\begin{array}{c} \text{H}_3\text{C} - \text{CH} - \text{CH}_2 - \text{C} \begin{array}{l} \nearrow \text{O} \\ \searrow \text{OH} \end{array} \\   \\ \text{Cl} \end{array}$ <p>3-chlorobutanoic acid<br/><i>carboxylic acid</i></p> |
| $\begin{array}{c} \text{CH}_3 - \text{C} = \text{CH}_2 \\   \\ \text{Br} \end{array}$ <p>2-bromopropene<br/><i>alkene</i></p>                                     | $\begin{array}{c} \text{H} \\   \\ \text{H}_3\text{C} - \text{CH}_2 - \text{C} - \text{COOH} \\   \\ \text{H}_2\text{N} \end{array}$ <p>2-aminobutanoic acid<br/><i>amine</i></p> | $\text{CH}_3 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{C} \begin{array}{l} \nearrow \text{OH} \\ \searrow \text{O} \end{array}$ <p>pentanoic acid<br/><i>carboxylic acid</i></p>                                              |

1. Available in April 2016'

2.

|                                                                                                                                                                       |                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| $\begin{array}{c} \text{CH}_3 - \text{CH} - \text{CH}_2 - \text{CH} - \text{CH}_3 \\   \qquad \qquad   \\ \text{Cl} \qquad \qquad \text{CH}_2\text{CH}_3 \end{array}$ | <p>The longest chain contains 6 C atoms not 5.</p> <p>The correct name is 2-chloro-4-methylhexane</p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|

|                         |  |
|-------------------------|--|
| 2-chloro-4-ethylpentane |  |
|-------------------------|--|

3.

